

TRANSACTIONS

OF THE

LINNEAN SOCIETY.

I. *Characters of a new Liliaceous Genus called Brodiaea.* By James Edward Smith, M.D. F.R.S. P.L.S.

Read April 19, 1808.

I HAVE had occasion, in treating of the distinctions between a calyx and corolla, *Introduction to Botany*, 263, to advert to a new genus of the liliaceous family, furnished with internal petals. It consists of two species, both which I have received, in a dry state, from Mr. Menzies, who discovered them in 1792 in New Georgia on the west coast of North America. The same liberal friend, to whom the Linnean Society, as well as myself, has so often been obliged, perceiving I had, in the place above mentioned, fallen into an error respecting the number of the internal petals, which are 3, not 6, has favoured me with his original drawings, made from living plants on the spot, with dissections. By these I am enabled better to understand the subject than I could from dried specimens, which I had been unwilling to submit to the process of boiling and anatomizing, till I might have occasion to investigate them thoroughly for precise description. Hence the divided inner petals of one of them

misled me. Mr. Menzies at the same time has communicated a suggestion of Mr. Salisbury's, that these supposed petals are barren filaments. It will appear, from the following characters and remarks, how far this idea is probable or not.

In the first place, as these plants form a most indubitable new genus, of the Liliaceous, or Patrician, order, I have called it *Brodiaea*, after James Brodie, Esq. F.L.S., of Brodie in North Britain, a gentleman whose scientific merits, whose various discoveries, and whose liberal communications on every occasion tending to elucidate the botany of his country in particular, require no elaborate display before the Linnean Society.

BRODIAEA.

TRIANDRIA *Monogynia*. Sect. 2; *flores inferi*.

NARCISSI. Juss. 54. Sect. 1; *germen superum*.

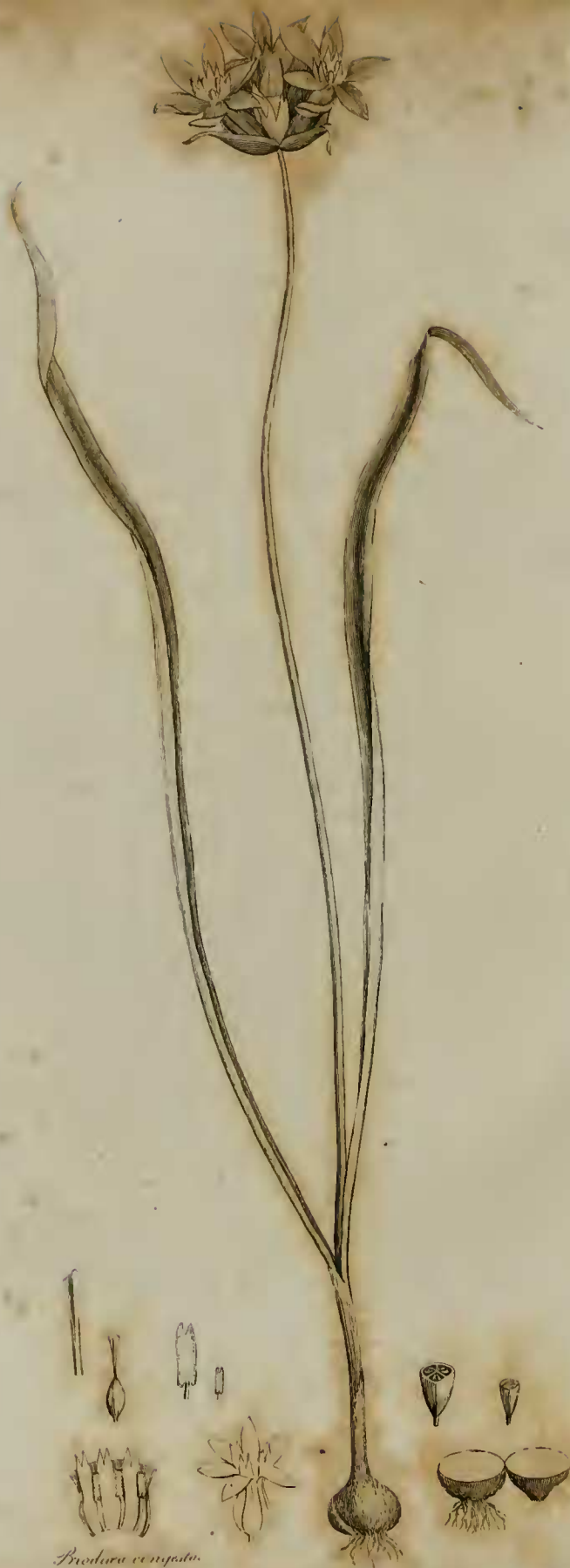
Calyx nullus. *Corolla* infera, tubulosa; limbo sexfido, regulari; coronâ triphyllâ in fauce. *Capsula* triloculâris, polysperma.

1. *B. grandiflora**, coronæ foliolis indivisis.

Radix bulbosa, globosa, solida, tunicâ multiplici, nervosâ. *Folia* bina, radicalia, vaginantia, lineari-lanceolata, acuta, involuto-canaliculata, glabra, ferè pedalia. *Scapus* solitarius, foliis paulò brevior, teres, glaberrimus, subsexflorus, plùs minùs tortuosus. *Pedicelli* umbellati, patentiusculi, filiformes, uniflori, longitudine varii. *Bracteæ* ad basin umbellæ, plures, lanceolatae, scariosæ, nervosæ, acuminatae, pedicellis longè plerumque breviores. *Flores* Galanthi magnitudine, pulchrè cyanei, erecti. *Corolla* semisexfida; tubo pallescente, laciniis regularibus, subæqualibus, latò lanceolatis, patienti-recurvis; fauce co-

* *Hookera coronaria*. *Salisb. Par. t.* 98.





Brodiaea corymbosa.

ronatâ foliolis tribus, petaloideis, erectis, oblongis, uniformibus, indivisis, dilutè flavescentibus, limbo duplò brevioribus, cum staminibus alternantibus. *Filamenta* tria, brevissima, fauce, inter coronæ foliola, inserta. *Antheræ* verticales, fulvæ, oblongæ, coronâ parùm breviores, bilobæ, lobis extùs longitudinalitèr dehiscantibus, haud absolutè bilocularibus. *Germen* pedicellatum, elliptico-trigonum, triloculare, seminibus columellæ insertis. *Stylus* cylindræus, longitudine ferè staminum. *Stigma* trigonum, trilobum.

2. *B. congesta*, coronæ foliolis bifidis.

TAB. I.

Radix et *herba* ferè prioris. *Umbella* minor, condensata, bracteis majoribus, latis, pedicellos superantibus. *Flores* cyanei, coronâ dilutiore, nec flavescente, foliolis semibifidis, acutis antheras longè superantibus, at limbo duplò, ut in priore, brevioribus. *Stamina* parùm e fauce prominentia inter coronæ foliola.

The three petal-like leaves, which crown the tube of the corolla in this genus, are, without doubt, analogous to the cup in *Narcissus*, the membranous expansion attached to the base of the stamens in *Pancratium*, and still more precisely to what Jussieu calls *squamulæ*, and Linnæus *nectarium*, in *Tulbaghia*. I see no more reason to reckon them barren filaments in one case than in the others; though, if my *Brodiaea grandiflora* were the only liliaceous plant furnished with them, they might, with great appearance of probability, be taken for such. But *Brodiaea congesta* guards us against this error, and approaches a step nearer to *Pancratium* and *Tulbaghia*. These three genera indeed bear the same relationship to the other *liliaceæ*, that *Gnidia*, *Struthiola* and *Quisqualis* do to *Daphne* and the rest of its natural order.